WHAT IS CLAIMED IS:

1. A method of identifying the presence of galectin-3 in cirrhotic or cancerous liver comprising:

obtaining a sample of cirrhotic or cancerous liver tissue;

providing an antibody to galectin-3;

contacting the sample with the antibody; and

analyzing the presence of galectin-3 in the sample.

2. The method of Claim 1, wherein the cancerous liver tissue is hepatocellular carcinoma.

3. The method of Claim 1, wherein the analysis of the presence of galectin-3 in the sample comprises a technique of the group consisting of fluorescence activated cell sorting (FACS), immunoprecipitation, Western blot, antibody staining, and a galectin-3 binding assay.

4. A method of identifying the amount galectin-3 expression in cirrhotic or cancerous liver comprising:

obtaining a sample of cirrhotic or cancerous liver tissue;

providing a probe which interacts with galectin-3 or an RNA encoding galectin-3;

contacting the sample with the probe; and

analyzing the presence of galectin-3 in the sample.

5. The method of Claim 4, wherein the cancerous liver tissue is hepatocellular carcinoma.

6. The method of Claim 4, wherein the probe is a member of the group consisting of a nucleic acid, a protein, a carbohydrate chemical agent, and a peptidomimetic.

7. The method of Claim 4, wherein the analysis of the presence of galectin-3 in the sample comprises a technique of the group consisting of fluorescence activated cell sorting (FACS), immunoprecipitation, Western blot, antibody staining, a galectin-3 binding assay, and a hybridization assay.

8. The method of Claim 4 further comprising quantifying the amount of galectin-3 protein or RNA in the sample.

9. The method of Claim 4 or 8 further comprising recording the amount of galectin-3 expression or the amount of galectin-3 on a computer readable media.

10. A method of identifying a subject in need of treatment or prevention of liver disease comprising:

obtaining a biological sample from a subject having RNA or protein, wherein the biological sample is obtained from the subject's liver;

providing a probe which interacts with galectin-3 protein or RNA encoding galectin-3;

contacting the biological sample with the probe under conditions which allow the probe to interact with the RNA or protein in the biological sample;

determining the amount of probe which interacts with the RNA or protein in the biological sample so as to determine the amount of galectin-3 expression; and

identifying the subject as a subject in need of treatment or prevention of liver disease by the presence of the probe in hepatocytes.

11. The method of Claim 10, wherein the liver disease is cirrhosis or hepatocellular carcinoma, or any neoplasm originating from the liver.

12. The method of Claim 10, wherein the biological sample comprises an hepatocyte.

13. The method of Claim 10, wherein the probe is a member of the group consisting of a nucleic acid, a protein, a carbohydrate chemical agent, and a peptidomimetic.

14. The method of Claim 10, wherein the determination of the amount of probe which interacts with the RNA or protein comprises a technique of the group consisting of fluorescence activated cell sorting (FACS), immunoprecipitation, Western blot, antibody staining, a galectin-3 binding assay, and a hybridization assay.

15. The method of Claim 10 further comprising quantifying the amount of galectin-3 protein or RNA in the sample.

16. The method of Claim 10 or 15 further comprising recording the amount of galectin-3 expression on a computer readable media.

17. A method of making a pharmaceutical for the treatment or prevention of hepatocellular carcinoma comprising incorporating an agent which inhibits the production of galectin-3 in liver cells or tissue in a pharmaceutical formulation, wherein the agent is a member of the group consisting of an antibody to galectin-3, a peptide, a carbohydrate, a chemical agent, a peptidomimetic which interacts with galectin-3, an antisense oligonucleotide complementary to a transcript encoding galectin-3, and a ribozyme complementary to a transcript encoding galectin-3.

18. A method of treatment or production of hepatocellular carcinoma or cirrhosis of the liver comprising administering an agent which inhibits the production of galectin-3 in liver cells or tissue in a pharmaceutical formulation, wherein the agent is a member of the group consisting of an antibody to galectin-3, a carbohydrate, a chemical agent, a peptide a peptidomimetic which interacts with galectin-3, an antisense oligonucleotide complementary to a transcript encoding galectin-3, and a ribozyme complementary to a transcript encoding galectin-3.

19. The method of Claims 17 or 18, wherein the agent is an antibody conjugated to a toxin or a radionuclide.

20. A method of screening for prognosis of cirrhosis or neoplasm originating from liver in a human comprising:

(a) isolating test proteins or RNA from a biological sample comprising hepatocytes, said biological sample being obtained from said subject; and

(b) determining the level of galectin-3 protein or an RNA encoding galectin-3 in said biological sample, wherein an elevated level of said galectin-3 protein or RNA encoding galectin-3 indicates a positive correlation with development of cancer or cirrhosis of the liver, and wherein the step of determining the level of galectin-3 protein or an RNA encoding galectin-3 is carried out by probing said galectin-3 protein or RNA encoding

galectin-3 with an antibody which recognizes galectin-3 protein or a nucleic acid complementary to the RNA encoding galectin-3.

21. A method of screening for risk of cancer or cirrhosis of the liver in a human subject comprising:

(a) isolating test proteins or RNA from a biological sample comprising hepatocytes, said biological sample being obtained from said subject;

(b) determining the level of galectin-3 protein or an RNA encoding galectin-3 in said biological sample, wherein an elevated level of said galectin-3 protein or RNA encoding galectin-3 indicates a positive correlation with development of cancer or cirrhosis of the liver, and wherein the step of determining the level of galectin-3 protein or an RNA encoding galectin-3 is carried out by probing said galectin-3 protein or RNA encoding galectin-3 with an antibody which recognizes galectin-3 protein or a nucleic acid complementary to the RNA encoding galectin-3; and

(c) identifying the human subject as being at risk based on the level of galectin-3 protein or RNA encoding galectin-3 determined in step (b).

22. The method of Claim 20 or 21 wherein said cancer is hepatocellular carcinoma or any neoplasm of liver origin.

23. A method for determining whether an individual is suffering from hepatocellular carcinoma or cirrhosis of the liver or is likely to suffer to suffer from hepatocellular carcinoma or any neoplasm of liver origin or cirrhosis of the liver in the future comprising determining whether the level of galectin-3 in the liver of said individual is above normal.

24. The method of Claim 23, wherein the step of determining whether the level of galectin-3 expression in the liver of said individual is above normal comprises determining whether the level of galectin-3 protein in a biological sample obtained from the liver of said individual is above normal.

25. The method of Claim 24, wherein the step of determining whether the level of galectin-3 protein in a biological sample obtained from the liver of said individual is above normal comprises:

contacting said biological sample with an antibody capable of specifically binding to galectin-3; and

determining whether the level of antibody binding to said sample is greater than the level of antibody binding observed in samples from individuals who are not suffering from hepatocellular carcinoma or cirrhosis of the liver.

26. The method of Claim 25, wherein the biological sample is a liver biopsy.

27. The method of Claim 26, wherein the determining step comprises determining whether the level of antibody binding to hepatocytes in the liver biopsy is greater than the level observed in biopsies from individuals not suffering from hepatocellular carcinoma or cirrhosis of the liver.

28. The method of Claim 23, wherein the step of determining the whether the level of galectin-3 expression in the liver of said individual is above normal comprises determining the level of mRNA encoding galectin-3 present in a biological sample obtained from the liver of said individual.

29. The method of Claim 28, wherein the level of galectin-3 mRNA is determined by a method from the group consisting of a nucleic acid amplification reaction, a nucleic acid hybridization assay, and an RNAse protection assay.